## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

We claim:

Claim1-25 (cancelled).

Claim 26 (original). A compound represented by C:

$$L_{\mathcal{H}_{n}}^{\mathsf{R}}\mathcal{H}_{m}^{\mathsf{Z}}$$

 $\mathbf{C}$ 

wherein

R is H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, -CO<sub>2</sub>H, - (CH<sub>2</sub>)<sub>d</sub>-R<sub>80</sub>, or an amino acid radical;

R<sub>80</sub> is independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;

d is an integer in the range 0 to 12 inclusive;

m is an integer in the range 0 to 6 inclusive;

n is an integer in the range 0 to 6 inclusive;

Z is thioalkyl, carboxylate, 2-(carboxy)aryl, 2-(carboxy)heteroaryl, 2-(hydroxy)aryl, 2-(hydroxy)heteroaryl, 2-(thiol)aryl, or 2-(thiol)heteroaryl; and

L is selected from the group consisting of

each instance of R<sup>1</sup> is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and -(CH<sub>2</sub>)<sub>d</sub>-R<sub>80</sub>.

- Claim 27 (original). The compound of claim 26, wherein said compound is complexed with a radionuclide.
- Claim 28 (original). The compound of claim 26, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

Claims 29-51 (cancelled).

## Claim 52 (original). A compound represented by E:

$$\begin{matrix} \mathsf{COOH} \\ \mathsf{H} \\ \mathsf{N} \\ \mathsf{H}_{n} \\ \mathsf{N} \\ \mathsf{H}_{m} \\ \mathsf{Z} \end{matrix}$$

 $\mathbf{E}$ 

wherein

m is an integer in the range 0 to 6 inclusive;

n is an integer in the range 0 to 6 inclusive;

p is an integer in the range of 1 to 10 inclusive;

Z is selected from the group consisting of -CH<sub>2</sub>COOH, alkyl, aryl, aralkyl,

L is selected from the group consisting of

each instance of R<sup>1</sup> is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and -(CH<sub>2</sub>)<sub>d</sub>-R<sub>80</sub>;

R<sub>80</sub> represents independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor; and d is an integer in the range 0 to 12 inclusive.

Claim 53 (original). The compound of claim 49, wherein said compound is complexed with a radionuclide.

Claim 54 (original). The compound of claim 49, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

$$R^1$$
 $R^1$ 
 $R^1$ 

Claim 55 (original). The compound of claim 49, wherein L is R<sup>1</sup> N ; R<sup>1</sup> is hydrogen and Z is alkyl.

Claim 56 (original). A compound represented by F:

wherein

m is independently for each occurrence an integer in the range 0 to 6 inclusive; n is an integer in the range 0 to 6 inclusive;

L is independently for each occurrence selected from the group consisting of

each instance of R<sup>1</sup> is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and -(CH<sub>2</sub>)<sub>d</sub>-R<sub>80</sub>;

R<sub>80</sub> is independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor; and

d is an integer in the range 0 to 12 inclusive.

Claim 57 (original). The compound of claim 56, wherein m is 1.

Claim 58 (original). The compound of claim 56, wherein n is 1.

$$R^1$$
 $R^1$ 
 $R^1$ 

Claim 59 (original). The compound of claim 56, wherein L is R<sup>1</sup> N ; and R<sup>1</sup> is hydrogen.

Claim 60 (original). The compound of claim 56, wherein L is R<sup>1</sup> N ; R<sup>1</sup> is hydrogen m is 1; and n is 1.

Claim 61 (original). The compound of claim 56, wherein said compound is complexed with a radionuclide.

Claim 62 (original). The compound of claim 56, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

Claim 63 (original). A compound represented by G:

$$L \xrightarrow{M} N \xrightarrow{N} N \xrightarrow{N} L$$

wherein

R is H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl,  $-CO_2H$ , - $(CH_2)_d$ - $R_{80}$ , or an amino acid radical;

R<sub>80</sub> is independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;

d is an integer in the range 0 to 12 inclusive;

m is independently for each occurrence an integer in the range 0 to 6 inclusive; n is an integer in the range 0 to 6 inclusive;

L is independently for each occurrence selected from the group consisting of

each instance of  $R^1$  is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and  $-(CH_2)_d$ -R<sub>80</sub>.

Claim 64 (original). The compound of claim 63, wherein m is 1.

Claim 65 (original). The compound of claim 63, wherein n is 1.

Claim 66 (original). The compound of claim 63, wherein R is hydrogen.

$$R^1$$
 $R^1$ 
 $R^1$ 

Claim 67 (original). The compound of claim 63, wherein L is R<sup>1</sup> N ; and R<sup>1</sup> is hydrogen.

Claim 68 (original). The compound of claim 63, wherein L is R<sup>1</sup> N ; R<sup>1</sup> is hydrogen; m is 1; n is 1; and R is hydrogen.

- Claim 69 (original). The compound of claim 63, wherein said compound is complexed with a radionuclide.
- Claim 70 (original). The compound of claim 63, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.
- Claim 71 (original). A compound represented by H:

$$L \xrightarrow{M} \underset{R}{N} \xrightarrow{N} \underset{R}{N} \xrightarrow{N} \underset{R}{N} \xrightarrow{N} \underset{R}{N} \xrightarrow{M} L$$

H

wherein

R is hydrogen, halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, or -(CH<sub>2</sub>)<sub>d</sub>-R<sub>80</sub>;

R<sup>2</sup> represents a moiety comprising a neutral or anionic Lewis base, H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, (amino)alkoxycarbonyl, (hydroxy)alkoxycarbonyl, (amino)alkylaminocarbonyl, (hydroxy)alkylaminocarbonyl, -CO<sub>2</sub>H, -(CH<sub>2</sub>)<sub>d</sub>-R<sub>80</sub>, or an amino acid radical;

R<sub>80</sub> is independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;

d is an integer in the range 0 to 12 inclusive;

m is an integer in the range 0 to 6 inclusive;

n is an integer in the range 0 to 6 inclusive;

L is independently for each occurrence selected from the group consisting of

each instance of R<sup>1</sup> is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and -(CH<sub>2</sub>)<sub>d</sub>-R<sub>80</sub>.

Claim 72 (original). The compound of claim 71, wherein m is 1.

- Claim 73 (original). The compound of claim 71, wherein n is 1.
- Claim 74 (original). The compound of claim 71, wherein R is hydrogen or -(CH<sub>2</sub>)<sub>d</sub>-R<sub>80</sub>.
- Claim 75 (original). The compound of claim 71, wherein R<sup>2</sup> is a moiety comprising an anionic Lewis base
- Claim 76 (original). The compound of claim 71, wherein R<sup>2</sup> is a carboxylate, thiolate, or phenolate

$$R^1$$
 $R^1$ 
 $R^1$ 

Claim 77 (original). The compound of claim 71, wherein L is R<sup>1</sup> N ; and R<sup>1</sup> is hydrogen.

- Claim 78 (original). The compound of claim 71, wherein L is R<sup>1</sup> N ; R<sup>1</sup> is hydrogen m is 1; n is 1; R is hydrogen or -(CH<sub>2</sub>)<sub>d</sub>-R<sub>80</sub>; and R<sup>2</sup> is a carboxylate, thiolate, or phenolate.
- Claim 79 (original). The compound of claim 71, wherein said compound is complexed with a radionuclide.
- Claim 80 (original). The compound of claim 71, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.
- Claim 81 (currently amended). A formulation, comprising a compound according to any of claims 26, 52, 56, 63, 71, 1-80; and a pharmaceutically acceptable excipient.
- Claim 82 (currently amended). A method of imaging a region in a patient, comprising the steps of: administering to a patient a diagnostically effective amount of a compound of

- claim <del>2, 3, 5, 6,</del> 27, 28, <del>30, 31,</del> 53, 54, 61, 62, 69, 70, 79 or 80; and obtaining an image of said region of said patient.
- Claim 83 (original). The method of claim 82, wherein said region of said patient is the head or thorax.
- Claim 84 (currently amended). A method of preparing a peptide conjugate incorporating a compound of claim 16, 25, 43 or 52, wherein the peptide conjugate is prepared using solid phase synthetic techniques.